

pressure differential calculated from a difference between an absolute value of pressure in the supply air channel and an absolute value of pressure in the exhaust air channel.

40. (Twice amended) The air-conditioning apparatus according to claim 38, wherein the [channel] pressure [of] in the supply air channel changes exclusively when supply air temperature changes within a predetermined temperature range, and when the supply air temperature is lower than this temperature range, the [channel] pressure [of] in the supply air channel has a first constant value, and when the supply temperature is higher than this temperature range the [channel] pressure [of] in the supply air channel has a second constant value.

43. (Amended) The air-conditioning apparatus according to claim 40, wherein the [channel] pressure [of] in the supply air channel is decreasing with decrease of difference between a desired value of the room temperature and an actual value of the room temperature.

REMARKS

Responsive to the final Office action of June 13, 2000, Applicant amended claim 33 in order to overcome the examiner's rejection and clearly distinguish the present invention from the prior art, and deleted claims 36 and 37. Claims 35, 38 and 43 has been amended to comply with amended claim 33. In making this amendment care has been taken to ensure that the claims remain supported by the specification and that no new matter has been added.

Applicant appreciate the time and consideration provided by Examiner in reviewing this application but respectfully traverses the rejection of claims 33-36 and 38 over Nelson (USPN 5,820,456) and over GB 344,914 for the following reasons.

In the Nelson's patent a paint spray booth 10 is disclosed. During the operation of the paint spray booth 10 the rate of the flow is controlled to reduce the presence of the impurities in the sprayed coating. Insofar, buffing is no longer required. The rate of flow of the air exhaust stream is controlled in response to changes in the differential between the booth air pressure and the ambient air pressure. Depending on the differential between the booth air pressure and the ambient

air pressure, the speed of the exhaust fan 26 or the position of the exhaust damper is controlled in such a way as to maintain the differential at a desired constant level.

In other words, **the differential** between the booth air pressure and the ambient air pressure should be maintained **constant** in order to enable a constant flow of air through the spray booth from the intake filter 20 to the exhaust air filter 23. As can be learned from col. 3, lines 54-57, Nelson describes how the turbulence can be substantially eliminated: "By adjusting exhaust air flow in response to the changes in the pressure differential, the pressure differential can be maintained substantially constant and turbulences thereby substantially eliminated."

In contrast, according to the claim 33, it is object of the present invention to maintain in a room an excess pressure over the outside pressure to provide a differential pressure turbulence for the purpose of **better mixing of the room air with the supply air** (see page 1, line 27 and page 2, line 5 of the specification).

Therefore, Nelson clearly teaches away from the present invention.

In GB 344,914 is disclosed an apparatus for ventilation of a set of rooms having means automatically operated to obtain a constant mass flow in the ventilating ducts. This mass flow is controlled by the pressure. Insofar, this reference discloses a method of controlling a ventilating air stream of substantially constant density by maintaining a substantially **constant difference** between the pressure of the still atmosphere and the total or static pressure in the ventilating stream, by utilizing any variation in the pressure difference to modify the resistance to the stream in such a manner as to restore the required pressure difference. In other words, the described method shows how a constant mass flow can be achieved by using the control of the pressure in the ducts. Specifically, the quantity of air for ventilating a set of rooms delivered to or extracted from each room can be varied without affecting the quantities supplied to or extracted from the other rooms. The pressure in the ducts is controlled via dampers for the purpose of a **constant mass flow**.

It is fundamental that to establish a *prima facie* case of obviousness requires three elements:

- a. "[T]here must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings."
- b. "[T]here must be a reasonable expectation of success."

- c. "[T]he prior art reference (or references when combined) must teach or suggest all the claim limitations." M.P.E.P. §§ 2142; 2143.

There is no suggestion, nor motivation in the cited references that the excess pressure in the room over the outside pressure is used for the purpose of better mixing of room air with the supply air.

Thus, both cited references clearly teach away from the present invention and cannot render it obvious. It is respectfully requested that the rejection under sections 102 (b) and 103 over the prior art be withdrawn.

The Commissioner is hereby authorized to charge any fees associated with this communication to our Deposit Account no. 50-0305. If any additional information is required, the Examiner is invited to contact Robert J. Schneider at (312) 845-3919.

Respectfully submitted,

By: 

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